ABSTRACT

A device for measuring alternating voltage in a conductor under test comprises a first set of capacitive voltage sensors 32a-f mounted on an electrically insulating support member. The sensors are disposed on the support member at spaced intervals along a first notional circle and are connected in parallel between an inner signal conductor 33 and a zero voltage reference conductor 37. A second set of capacitive voltage sensors 34a-f are mounted on the support member at spaced intervals along a second notional circle and are connected in parallel between an outer signal conductor 35 and the reference conductor 37. The support member is configured to allow a conductor under test 38 to be introduced into the interior of the device so that the sensors surround the axis of the conductor. Each sensor has a signal electrode 48 connected to the signal conductor and a reference electrode 50 connected to the reference conductor and is orientated with the signal electrode facing the conductor under test. The voltage in the conductor under test is derived as a function of the voltage across the signal conductor and the reference conductor.